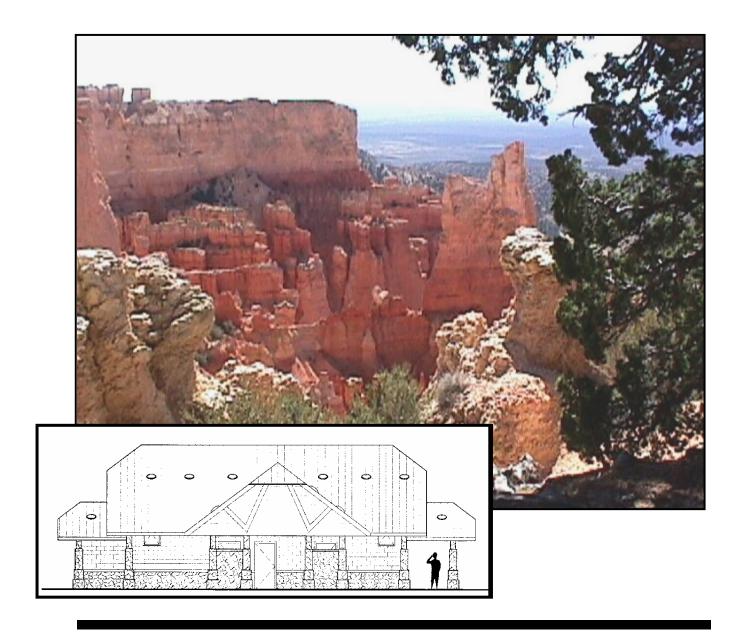


Environmental Assessment



Replace and Expand Sunset Point Restroom and Renovate Picnic Facility

IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE

Bryce Canyon National Park P.O. Box 170001 Bryce Canyon, UT 84717-0001

L3031 BRCA (77351)

December 1, 2003

The National Park Service proposes the renovation of the Sunset Point visitor use area. This project would provide a larger, more modern public restroom facility, hard-surfaced sidewalks, and renovate the existing picnicking ground to reduce environmental damage.

Two alternatives are discussed in the EA. The No Action alternative describes the action of continuing the present management operation and situation. The Preferred Alternative proposes the actions described above. An analysis of the environmental impacts anticipated with implementing either of the alternatives is included. Another alternative considered and rejected was to close the existing facility; this alternative was dismissed because it is unreasonable.

Enclosed for your review is the Replace and Expand Sunset Point Restroom and Renovate Picnic Facility Environmental Assessment prepared by the National Park Service. We are providing this document for a 45-day public review and comment period. The public comment period closes on January 16, 2004. If you wish to comment, you may mail comments to the name and address below. Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the record, which we will honor to the extent allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

Please address your comments to: Bryce Canyon National Park

Attn: Sunset Point EA P.O. Box 170001

Bryce Canyon, UT 84717-0001

Or email: BRCA Superintendent@nps.gov

Thank you for your interest in Bryce Canyon National Park.

Sincerely,

Craig C. Axtell Superintendent

ENVIRONMENTAL ASSESSMENT

Replace and Expand Sunset Point Restroom and Renovate Picnic Facility

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PURPOSE AND NEED

The purpose of this project is to replace and expand the restroom facility, upgrade pedestrian walks and renovate the picnic area at Sunset Point in Bryce Canyon National Park, Utah.

The existing restroom facility at Sunset Point was designed and constructed in 1972 for an annual park visitation of 750,000 and has never met basic visitor or park needs. Presently, the annual visitation exceeds 1,500,000 with an average daily summer visitation of 7,800. The existing facility is completely inadequate to meet this demand and does not meet accessibility requirements. Inspections by Intermountain Region Public Health staff consistently rate this facility as "very poor" in meeting public health and safety standards and in severe need of renovation and expansion.

Toilet fixtures, plumbing and water and wastewater lines are undersized and failing, requiring constant maintenance and frequent facility closures. The lack of defined walkways in the picnic facility has led to trampling by visitors creating compacted, vegetation-bare areas with impacts spreading to surrounding natural areas.

Constructing a well-designed, revegetated and protected picnic area would prevent further natural resource degradation and restore portions to a more natural state. These improvements would result in a public health and safety compliant facility, increased visitor satisfaction, improved resource protection and a positive National Park Service image.

Legislative Mandates And Special Commitments

Legislative mandates and special commitments include those measures that apply to the entire National Park Service, plus park-specific requirements.

The intent of all the mandates and commitments is to establish sustainable conservation and to avoid impairment of NPS lands and resources. As a result, visitor use can occur only to the extent that it does not significantly adversely affect the park and its natural and cultural resources.

The National Park Service and its mandates are authorized under the NPS Organic Act (16 USC 1, 2-4) and the General Authorities Act (16 USC 1a-8). These acts direct the agency to conserve the scenery, the natural and historic objects, and the wildlife, and to provide for the enjoyment of those resources in such a manner as to leave them unimpaired for future generations. Amending the NPS Organic Act of 1916, the Redwood Act (March 27, 1978, 16 USC 1a-1) reaffirmed the mandates of the Organic Act and provided additional guidance on national park system management: "The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established."

If this proposal is implemented, the NPS would comply with all applicable laws and executive orders, including the following:

Threatened and Endangered Species: Section 7 of the Endangered Species Act of 1973, as amended (16 USC 1531 et seq.) requires all federal agencies to consult with the U.S. Fish and Wildlife Service to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitats. The NPS is in compliance with Section 7 and is coordinating all actions with the Fish and Wildlife Service.

Water Quality: Regulations implementing Section 404 of the Clean Water Act (33 USC 1344) are administered by the U.S. Army Corps of Engineers, which issues permits for work affecting navigable waters and wetlands of the United States. If necessary a permit application will be made to the Corps of

Engineers for proposed activities which are regulated by that agency in conformance with Section 404 of the Clean Water Act.

If any unknown hazardous waste is found in areas proposed for development or visitor use, the NPS would comply with the Comprehensive Environmental Response Compensation and Liability Act (42 USC 9601 et seq.) to determine if resources are being polluted by the substance or if it presents a health and safety issue. If any excavated material is determined to be hazardous, the NPS would comply with the Resource Conservation and Recovery Act (42 USC 6901 et seq.).

Cultural Resources: The NPS is mandated to preserve and protect its cultural resources through the Organic Act of August 25, 1916, and through specific legislation such as the Antiquities Act of 1906, the National Environmental Policy Act of 1969 (as amended), and the National Historic Preservation Act of 1966, NPS *Management Policies*, the *Cultural Resources Management Guideline* (DO-28), and the Advisory Council on Historic Preservation's implementing regulations regarding "Protection of Historic Properties" (36 CFR 800). Other relevant policy directives and legislation are detailed in DO-28.

Bryce Canyon Legislative Background And The Purpose Of The Park

The area known as Bryce Canyon was set aside as a national monument in 1923. Interest in the area continued to grow after the declaration of the new national monument. In 1924, Bryce Canyon National Monument was declared Utah National Park. An act of congress in 1928 increased the amount of protected land to double what was already protected by the national park (now 35,000 acres). This addition of land was accompanied by another name change as Bryce Canyon National Park was officially designated on February 25, 1928. The national monument, and later park, was established to protect the fascinating geologic structures known as hoodoos and other natural and cultural resources.

Relationship to Other Planning

This project has been developed consistent with NPS legal mandates and NPS Management Policies. A review of these mandates and commitments is provided in this document. The Bryce Canyon General Management Plan (1981) provides broad directions for management of the park and identifies actions to improve the quality of visitors' experience, improve management and protection of resources, and other items. The proposed project analyzed in this document was reviewed for conformance with the General Management Plan.

Issues

Issues are environmental concerns or problems that may result from implementation of any of the alternatives. Issues identified by NPS specialists and others were used to help formulate the alternatives and mitigation measures. The major issues involved with the proposed project are: Potential adverse effects on biotic communities, special status species, and critical habitats; and the potential for improving visitor experience.

Impact Topics

Impact topics, or those resources and values that could be affected by the proposed action or alternatives, were identified by specialists in the National Park Service, other state and federal agencies and by the public in previous project scoping efforts. Topics were selected for detailed analysis based on substantive issues, environmental statutes, regulations, executive orders and NPS Management Policies. A summary of specific impact topics and the rationale for their selection is given below.

Soils

Ground disturbance associated with the construction of new structures directly affects the soil. Therefore, soils are addressed as an impact topic.

Vegetation

Effects on vegetation are analyzed in this document because construction of buildings and associated amenities and facilities affects the vegetation in the area. There is also the opportunity for improving existing vegetation conditions.

Wildlife

The action alternative could potentially affect the quality of wildlife habitat or directly disturb individual animals, so this topic is included for analysis.

Threatened and Endangered Species

In a memorandum dated October 23, 2002, the U.S. Fish and Wildlife Service identifies the following 15 species in the area that are federally listed as either endangered, threatened or candidates:

- Aquarius paintbrush
- Autumn buttercup
- Jones cycladenia
- Maguire daisy
- Ute ladies'-tresses
- Bonytail
- Colorado pikeminnow
- Humpback chub
- Razorback sucker
- Bald eagle
- California condor
- Mexican spotted owl
- Southwestern willow flycatcher
- Western yellow-billed cuckoo
- Utah prairie dog

Most of these are not in the area affected by the proposed action and so are not considered in this assessment. There would be no depletion of water from any portion of the drainage basin occupied by listed fishes as a result of implementing either alternative. The Utah prairie dog will be addressed because of possible impacts to habitat. If adverse impacts to a listed species are identified, consultation with the USFWS would be initiated.

Visitor Use and Experience

Visitor use would be affected by implementation of either alternative, so this topic is included for analysis. Factors that affect visitor experience are safety, scenery, and condition of facilities.

Impact Topics Considered but Dismissed from further Analysis

The following resources would not be affected by any of the alternatives, or do not exist in the area and so will not be discussed further:

Air Quality

The 1963 Clean Air Act (CAA), as amended (42 U.S.C. 7401 et seq.), requires federal land managers to protect park air quality, while the 2001 NPS *Management Policies* address the need to analyze air quality during park planning.

Bryce Canyon National Park is designated a Class 1 area under the Clean Air Act. The air quality here is among the best in the nation with occasional periods of regional haze, forest fire smoke, or widely dispersed industrial pollution.

Should the preferred alternative be selected, local air quality would be temporarily affected by dust and vehicle emissions. Hauling material and operating construction equipment would result in increased vehicle emissions. Volatile organic compounds, carbon monoxide and sulfur dioxide emissions would generally disperse fairly quickly from the construction area. This degradation would last only as long as construction activities occurred and would have only a negligible effect on regional pollutant levels.

Fugitive dust plumes from construction equipment and vehicle traffic would intermittently increase airborne particulate concentrations in the area near the project site depending on soil moisture. This dust would be temporary, highly localized and have a negligible effect on regional particulate levels.

In summary, if the action alternative is selected, local air quality in the immediate vicinity would be temporarily degraded by dust generated from road reconstruction activities and emissions from construction equipment and vehicles. There may be increased automobile emissions from vehicles using the site but neither overall park air quality nor regional air quality would be more than negligibly affected. For these reasons, air quality was dismissed as an impact topic in this document.

Water Resources

The proposed project would occur in previously-disturbed areas. No effects on water quality, water quantity or surface hydrology are anticipated. No watersheds or drainages would be affected by the preferred alternative and construction activity would not result in a point source discharge into any perennial or ephemeral stream.

Wetland and Floodplains

The site of the proposed action is not located within a known wetland or floodplain, so these resources would not be affected.

Wilderness, Wild and Scenic Rivers

These are Congressionally-designated areas and do not exist in the area of concern of this environmental assessment. There is proposed wilderness and suitable wild and scenic rivers in the park but these would not be affected by the proposal.

Cultural Resources

The 1966 National Historic Preservation Act as amended (NHPA, 16 USC 470 et seq.), the 1916 NPS Organic Act, and NPS planning and cultural resource guidelines call for the consideration and protection of historic properties in development proposals (The term historic properties refers to all cultural resources, including archeological resources, cultural landscapes, ethnographic resources, and historic resources eligible for or listed on the National Register of Historic Places). The evaluation of potential impacts of proposed actions on historic properties is required by NEPA and NHPA, as is attention to the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) for sites where human remains or burials may be present.

Intensive archeological surveys, meeting the Secretary of the Interior Standards for the Treatment of Archeological Properties, were conducted in the Area of Potential Effect (MWAC 1986, Wenker 2002) and resulted in a negative finding. The Park submitted an Assessment of Effect for the proposed project to

the Utah State Historic Preservation Officer (SHPO) in July, 2002. The SHPO concurred with the Park's determination of "No Historic Properties Affected" on July 29, 2002. Based on formal evaluation (NPS 1998), no eligible cultural landscapes are in the Area of Potential Effect. No ethnographic research has been conducted to determine ethnographic resources, however, culturally affiliated groups will be sent a copy of the draft EA and comments will be solicited in regard to ethnographic concerns. The Rim Road and associated Sunset Point parking area have been determined not eligible (SHPO 2000) for listing on the National Register of Historic Places due to previous road modifications. The nearby National Register listed Rim Trail will not be affected by the proposed action. The existing restroom facility was constructed in 1972 and is not eligible for National Register listing. The area of potential effect would be restricted to areas shown on the project plans. No new disturbance would occur outside this area. Vehicle storage, staging areas, and turn-around areas would be located in areas devoid of archeological, historical, and ethnographic resources.

If previously unknown archeological resources are unearthed during construction, work would be stopped in the area of the discovery and the National Park Service would be contacted. The NPS would consult with the Utah State Historic Preservation Officer (SHPO) and, as appropriate, the Advisory Council on Historic Preservation. If impacts to National Register-elegible resources could not be avoided by redesign, mitigating measures would be developed in consultation with the SHPO to help ensure that the informational significance of the sites would be preserved. If appropriate, provisions of the Native American Grave Protection and Repatriation Act of 1990 would be implemented.

After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, *Assessment of Adverse Effects*), the National Park Service concludes that implementation of the either alternative described in this document would result in a "no historic properties affected" determination. This is due to the fact that no archeological resources, historic resources, ethnographic resources or cultural landscapes are known to exist in the project area. A courtesy copy of this environmental assessment will be forwarded to the Utah SHPO.

Prime or Unique Farmlands

In August of 1980, the Council on Environmental Quality (CEQ) directed that federal agencies must assess the effects of their actions on farmland soils classified by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) as prime or unique. Prime farmland is defined as soil that particularly produces general crops such as common foods, forage, fiber, and oil seed; unique farmland produces specialty crops such as fruits, vegetables, and nuts. According to NRCS, none of the soils in the project area are classified as prime or unique farmlands. Therefore, the topic of prime and unique farmlands was dismissed in this document.

Soundscapes

The term "soundscapes" refers to the ambient or natural background sound of a given area. Analysis of potential impacts to natural soundscapes is required by NPS Management Policies. The proposed construction site is in a semi-developed area with a great deal of vehicle traffic. Construction equipment would increase the ambient noise levels during the construction period, however, these would be short-term in duration. The action alternative would not affect the long-term soundscape of the area.

Night Sky or Lightscapes

The NPS recognizes that clear views of the night sky is an important value to park visitors. Artificial light pollution can affect opportunities for night sky viewing and enjoyment. If the action alternative is selected, light pollution would be minimized by designing outdoor lighting on the building and any path lighting so that it is directed toward the ground, does not use excessive wattage, and does not scatter. Therefore, any impacts to lightscapes are anticipated to be negligible

Indian Trust Lands

No lands comprising Bryce Canyon National Park are held in trust by the Secretary of the Interior solely for the benefit of American Indians due to their status as American Indians.

Urban Quality and Design of the Built Environment

Consideration of this topic is required by 40 CFR 1502.16. Urban area quality is not an issue. Vernacular (park) architectural designs will be taken into consideration in this project.

Energy Requirements and Conservation Potential

The preferred alternative would result in a facility with inherent energy needs that would be similar to existing facilities. Certain design features such as daylighting would decrease energy needs in the new structure. It would not have a measurable effect on energy availability or costs.

Environmental Justice

Executive Order 12898 requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects on minorities or low income populations or communities. The proposed action is not expected to cause adverse health or environmental impacts to minorities or low-income populations or communities and so will not be considered further.

Socioeconomic Environment

The proposed action would neither change local and regional land use nor appreciably impact local businesses or other agencies, groups, or organizations. Implementation of the proposed action could provide a negligible beneficial impact to the economy of nearby towns, as well as Garfield County (e,g, minimal increases in employment opportunities for the construction workforce and revenues for local businesses generated from construction activities and workers). Any increase, however, would be temporary and negligible, lasting only as long as the construction period. Therefore, socioeconomic environment was dismissed as an impact topic.

DESCRIPTION OF ALTERNATIVES

Alternative A - No Action (Continue current management)

Under this alternative, no new comfort station or any renovations would be constructed at the site. The picnic area would not be upgraded. Existing conditions and uses of the area would continue as they are under current management. Visitors would continue to use the existing facility. Visitor use of the site would increase as overall park visitation increases.

In the No Action alternative, the NPS would respond to future needs and conditions associated with visitor experience without major actions or changes in current management. No Action does not imply or direct discontinuing any present actions or removing existing uses, developments, or facilities.

Alternative B - Preferred Alternative

The preferred alternative would replace and expand the restroom facility, and renovate walks and the picnic area at Sunset Point. Existing facilities would be upgraded and modernized.

There are three main components of this alternative (design drawings attached):

- 1. Replace 1,320 feet of water and wastewater main pipelines and associated hydrants, access covers and valves
- 2. Expand existing 600 square-foot restroom facility to a 2000 square-foot facility
- 3. Re-design picnic area, accessible walks, landscaping, and conduct site revegetation

The new facility would be constructed of materials and use colors that would be harmonious with the natural setting and not detract. Skylights would be used in the building to minimize reliance on electrical lighting. There would be two men's and two women's rooms so that one can remain open while another is closed for cleaning or maintenance. All restrooms would have a handicapped accessible stall and be in compliance with current accessibility guidelines. In addition, there would be a separate unisex handicapped-accessible restroom with its own door.

Existing picnic sites would be formalized at the site and at least one would be handicapped accessible. This would involve improving the appearance and definition of each site. Defined walkways to be constructed would total 552 linear feet and be delineated with 2-rail timber fences to prevent visitors from trampling adjacent areas (there are no formal walkways in the road loop now). Three new crosswalks would be added on the road for pedestrian access to and from parking, the bus stop, and hiking trails.

Existing parking areas and the bus stop would remain as they are now. The existing restroom would remain open during construction and then be removed at completion of the project.

Construction would involve trenching to bury new pipelines and related fittings, grading, some excavation to construct the new restroom, and other surface disturbance to renovate the picnic area and pedestrian walkways. All construction would take place within the existing previously-disturbed road loop. The total construction area is estimated to be 2.8 acres, not all of which may be disturbed. Approximately 0.1 acre would be covered by the new facility and paved area. The footprint of the old restroom and any remaining disturbed ground would be re-contoured at the completion of the project. Native plant species may be used to revegetate the area or it would be left to recover naturally.

These improvements would result in a functionally adequate and public health and safety compliant facility and provide long term resource protection with an expected service life of up to 50 years.

Alternatives Dismissed from Further Consideration

Another alternative considered was to close the existing facility. This approach would result in additional pressure on remaining limited park facilities and increase adverse impacts to natural areas as visitors may step into the woods to relieve themselves. It is not reasonable to expect visitors to wait to use a restroom until out of the park. This alternative was dismissed because it is unreasonable.

Identification of the Environmentally Preferred Alternative

The Council on Environmental Quality (CEQ) provides direction that "[t]he environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101. The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), which guides the CEQ:

- 1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- 2. assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- 3. attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- 4. preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- 5. achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- 6. enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Alternative A would continue existing uses and operations and not result in any project-related disturbance of natural or cultural resources, which would meet Criterion 1. However, it would allow the continuation of adverse impacts to visitor enjoyment and indirect resource impacts (summary: Criteria 2, 3, 4, 5, and 6 not met).

Alternative B would improve visitor enjoyment and result in disturbance to a total of 2.8 acres or less. However, this disturbance would occur in a heavily used and previously disturbed area. The construction of fenced walkways and restoration of some impacted areas would reduce cumulative resource impacts (Criteria 2, 3, and 5 met).

After careful review of potential resource and visitor impacts, and developing proposed mitigation for impacts to natural and cultural resources, the environmentally preferred alternative is Alternative B. Alternative B surpasses the other alternative in realizing the fullest range of national environmental policy goals as stated in §101 of the National Environmental Policy Act. Overall, Alternative B does (a) assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings; (b) attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences; and (c) achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.

Impact Summary

Impact Topic	Alternative A - No Action	Alternative B - Preferred
Soils	There would be no project-related impacts	This alternative would result in minor,
	as a result of this alternative. Continuation	long-term adverse impacts and
	of negligible to minor, long-term adverse	negligible, long-term beneficial impacts
	impacts to soil resources would result from	to soil resources.
	visitor use.	
Vegetation	There would be no project-related impacts	Vegetative communities in the park
	as a result of this alternative. Vegetative	would receive minor, long-term
	communities would continue to receive	beneficial impacts.
	negligible to minor, long-term adverse	
	impacts.	
Wildlife	Wildlife populations or habitat would not	This alternative would cause a minor,
	be affected by the no action alternative.	short-term adverse impact to wildlife.
Threatened and	The No Action alternative would have no	The preferred alternative would have no
Endangered Species	effect on such species.	effect on such species.
Visitor Experience	There would be no new impacts to visitor	There would be a minor, short-term
	experience under the No Action alternative.	adverse impact on visitors during
	However, it would cause the continuation of	construction and a moderate, long-term
	minor to moderate, long-term adverse	beneficial effect on visitor experience after
	impacts to opportunities for visitors to have	construction.
	a pleasant park experience.	

AFFECTED ENVIRONMENT

Bryce Canyon National Park is located in remote southern Utah (map attached). It consists of 35,000 acres and shares boundaries with the Dixie National Forest and Grand Staircase-Escalante National Monument.

Soils

In general, the top of the Paunsaugunt Plateau is covered with gravely loam-type soils. These shallow, well-drained soils are derived predominately from limestone. These soils are classified for land-use capability as moderately productive rangelands.

Soils in the picnic area are unprotected by vegetation and compacted from heavy visitor use. Elsewhere in the project area, soils have been disturbed by construction and use of the roads, paths and restroom facility.

Vegetation

Sunset point is in a coniferous forest composed primarily of ponderosa pine with occasional Rocky Mountain juniper. The understory is dominated by greenleaf manzanita, with Utah mountain-lilac (*Ceanothus martinii*), snowberry (*Symphoricarpos oreophilus*), Oregon grape (*Mahonia repens*), and alder-leaf mountain mahogany (*Cecocarpus montanus*) as associated shrubs. Graminoids and forbs are less prominent, but Ross's sedge (*Carex rossii*) is present along with gumweed aster (*Machaeranthera grindelioides*) and rock goldenrod (*Petradoria pumila*).

Vegetation in the project site (within the road loop) is heavily trampled. Coniferous trees greater than 10" in diameter dominate the site with no regeneration of grasses and forbs occurring, leaving large areas of bare ground.

Wildlife

There is a wide variety of wildlife that utilize the park. Utah prairie dogs, golden-mantled ground squirrels, mule deer, turkey, ravens, and red-tailed hawks are the most conspicuous animal species. Numerous insect and some reptilian species may be found on or near the project site. Some species, such as squirrels and various birds, may have come to rely on trash, leftover food or handouts from park visitors in the picnic area.

Threatened and Endangered Species

Surveys for peregrines have been conducted at Bryce Canyon National Park since 1982. All nesting territories are located to the east of the rim and south of the main amphitheater, well away from the proposed action. Bald eagles have been observed soaring over the park but rarely observed landing, according to wildlife observation files in the park's Resource Management Office. Suitable habitat for the Mexican spotted owl and the southwestern willow flycatcher exists below the rim over seven kilometers (4.3 miles) south and east of the project site.

The threatened Utah prairie dog (*Cynomys parvidens*) is the only federally listed species that may occupy habitat near the proposed action on a regular basis. The Utah prairie dog is a burrowing rodent in the squirrel family (Sciuridae) that occurs only in southwestern Utah. It is a member of the white-tailed prairie dog group which once inhabited vast areas of the western Great Plains. The Utah prairie dog is the most restricted of the three members of this group. Its total numbers declined drastically from the 1920s to 1976. This decline was caused by human-related habitat alteration and by intentional poisoning, which resulted from the belief that prairie dogs compete with domestic livestock for forage. At present, the Utah

prairie dog is still threatened over much of its range by loss of habitat. Despite the problems listed above the Utah prairie dog saw an increase in overall population numbers between 1976 and 1991 (USFWS 1991). However, the population numbers have fluctuated overtime and have not continued on an upward trend (Utah Prairie Dog Recovery Implementation Team 1997). At Bryce Canyon National Park Utah prairie dog reintroductions occurred between 1976 and 1988 after being absent from the park since the 1960's. Since the reintroduction program prairie dog population numbers at Bryce Canyon have fluctuated from under 50 animals to over 200 (Wallen 1999). Colonies are found in the meadows of the park. The Sunset Point area is forested, and there have been no observed individual prairie dogs or colonies within the proposed site.

Visitor Experience(and Park Operations)

The National Park Service provides visitors with opportunities to explore the landscape and experience a relaxing peaceful encounter in the outstanding natural setting of Bryce Canyon National Park. Facilities in the area such as restrooms, campgrounds, lodging and restaurants enhance the visitor experience. At Sunset Point, the site of the proposed project, visitors enjoy the scenic views, access the under-the-rim trail system, access the park shuttle system, picnic, and use the restroom facility.

In 2001, the park visitation was 1,569,879 (from Public Use Statistics Office accessed through www.nps.gov). Park staff estimates that 88% of the total park visitors will stop at Sunset Point for an average daily summer visitation of 6,900 at this location. This visitation is serviced with only 2 urinals, 1 toilet and 2 sinks in the men's room and 3 toilets and 2 sinks in the women's room.

The existing facility provides very poor service and is completely inadequate in meeting the needs of visitors to the park and is, consequently, negatively impacting visitor experiences.

Public Health and Safety

Specific risks to health are the unsanitary conditions resulting from overuse of the existing facility. When visitors are unable to use this facility due to lines or closures, they walk into the surrounding natural areas to take care of business. Park staff and visitors are then exposed to the high health and safety risks associated with human waste.

ENVIRONMENTAL CONSEQUENCES

Introduction

This section describes the environmental consequences associated with the alternatives. It is organized by Impact Topics, which distill the issues and concerns into distinct topics for discussion analysis. These topics focus on the presentation of environmental consequences, and allow a standardized comparison between alternatives based on the most relevant topics. Because definitions of intensity vary by impact topic, intensity definitions are provided separately for each impact topic.

Duration

For all impact topics, the duration of impacts in this document is defined as follows:

Short-term – impacts that last only during the construction period.

Long-term – impacts that last longer than the construction period.

Cumulative Impacts

The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act, require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). These impacts include the actions of neighboring agencies and private landowners such as road construction, visitor services, livestock grazing, extractive industries (e.g. mining, logging). Cumulative impacts also incorporate activities within the park, including construction and maintenance of the park roads, visitor use areas, park operations areas, Rim Trail and other park trails. Current projects include repair of the water collection system at Dr. Goode Spring, protection of cultural resources, building renovation and repair work on the main park road. Cumulative impacts are considered for all alternatives and are presented at the end of each Impact Topic discussion.

Impairment of Park Resources or Values

In addition to determining the environmental consequences of the preferred and other alternatives, NPS *Management Policies* and Director's Order 12, *Conservation Planning, Environmental Impact Analysis and Decision-Making*, require analysis of potential effects to determine if actions would impair park resources.

The fundamental purpose of the National Park System, established by the Organic Act and reaffirmed by the General Authorities Act, begins with a mandate to conserve park resources and values. Park Service managers must always seek ways to avoid or minimize, to the greatest degree practicable, adverse impacts on park resources and values. However, the laws do give managers the discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resource or values. The prohibited impairment is an impact that, in the professional judgment of the responsible manager, would harm the integrity of park resources or values, including opportunities that otherwise would be present for the enjoyment of those resources or values. An impact to any park resource or value could constitute impairment. However, an impact would more likely constitute impairment to the extent it affects a resource or value whose conservation is:

• necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park unit;

- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified as a goal in the park's General Management Plan or other relevant NPS planning documents.

Potential impairment that may result from Park Service management activities, visitor activities, or activities undertaken contractors and others operating in the park is analyzed and a determination of impairment is made for each natural and cultural resource impact topic in this document.

Assessment of Anticipated Impacts

Soils

Methodology

The assessment of impacts to soils is based on professional knowledge and information from the park staff. The thresholds of change for the intensity of an impact are defined as follows:

Negligible: An action that could result in a change to soil, but the change would be so small that it

would not be of any measurable or perceptible consequence.

Minor: An action that could result in a change to soil, but the change would be small and

localized and of little consequence.

Moderate: An action that would result in a change to soil; the change would be of consequence and

cover a relatively wide area. Mitigation measures would probably be necessary to offset

adverse effects and would likely be successful.

Major: An action that would result in a permanent loss or alteration of soil over a large area; the

change would be measurable and result in a severely adverse or major beneficial impact over a wide area in and out of the park. Mitigation measures to offset adverse effects

would be needed, extensive, and their success could not be guaranteed.

IMPACTS OF ALTERNATIVE A - NO ACTION

There would be no project-related ground disturbance with the potential to impact these resources. There would be no change to existing conditions. Existing minor, long-term adverse impacts to soils would continue, including compaction and changes in runoff or permeability caused by visitor trampling in the picnic area.

Cumulative Impacts

Compaction and changes in runoff or permeability caused by visitor trampling would continue in the picnic area under this alternative. Impacts that have or are occurring to soils include commercial, agricultural and residential land use development; construction and maintenance of roads, trails and utility lines and recreational uses in and out of the park. This alternative would not contribute any new impacts to the impacts of other past, present and reasonably foreseeable future actions to soils, resulting in no cumulative impacts to soil resources in the region.

Conclusion

There would be no project-related impacts as a result of this alternative. Continuation of negligible to minor, long-term adverse impacts to soil resources would result from continued visitor use. There would be no impairment of park resources or values.

IMPACTS OF ALTERNATIVE B - PREFERRED

Soils under this alternative would be impacted by blading (clearing), excavation, trenching and heavy equipment use. A maximum area of 2.8 acres would be disturbed. These actions would affect soil compaction and permeability, constituting minor, long-term adverse impacts. Soils in the project area have been in a disturbed state for 30 years since the original construction of the road, paths and facilities.

Undeveloped portions of the road loop would be revegetated with native plants that would hold soil in place. In addition, the use of fenced walkways would prevent visitors from trampling and compacting soil in adjacent areas. These actions would cause long-term, negligible beneficial impacts.

Cumulative Impacts

Impacts that have or are occurring to soils in the region include commercial, agricultural and residential land use development; construction and maintenance of roads, trails and utility lines and recreational uses in and out of the park. These actions have resulted in soil disturbance in the area of the proposed action causing long-term adverse impacts that vary from negligible to moderate. This alternative would contribute both adverse and beneficial impacts to the impacts of other past, present and reasonably foreseeable future actions to soils, resulting in minor, long-term adverse cumulative impacts to soil resources in the region.

Conclusion

This alternative would result in minor, long-term adverse impacts and negligible, long-term beneficial impacts to soil resources. There would be no impairment of park resources or values.

Vegetation

Methodology

Available information on vegetative resources was compiled. Predictions about short- and long-term site impacts were based on recent data from park and previous studies of impacts from similar actions to natural resources.

The thresholds of change for the intensity of an impact are defined as follows:

Negligible: No native vegetation would be affected or some individual native plants could be affected

as a result of the action, but there would be no effect on native species populations. The effects would be on a small scale, and no species of special concern would be affected.

Minor: An action would affect some individual native plants and would also affect a relatively

minor portion of that species' population. Mitigation to offset adverse effects, including special measures to avoid affecting species of special concern, could be required and

would be effective.

Moderate: An action would affect some individual native plants and would also affect a sizeable

segment of the species' population over a relatively large area. Mitigation to offset adverse effects could be extensive, but would likely be successful. Some species of

special concern might also be affected.

Major: An action would have a considerable effect on native plant populations, including species

of special concern, and affect a relatively large area in and out of the park. Mitigation measures to offset the adverse effects would be required, extensive, and success of the

mitigation measures would not be guaranteed.

IMPACTS OF ALTERNATIVE A - NO ACTION

Under the no action alternative, there would be no project-related ground disturbance with the potential to impact vegetation. Existing negligible to minor, long-term adverse impacts to vegetation from visitor use at Sunset Point would continue.

Cumulative Impacts

Vegetation in the region is being impacted by commercial and residential development, road construction and maintenance, livestock grazing, and agriculture. These actions cause long-term adverse impacts from destruction of native vegetation and introduction of exotic species that replace natives. The loss of some forest habitat at Sunset Point has already occurred with the construction of the existing road, trails, and facilities. This alternative would not contribute to other past, present and reasonably foreseeable future actions and would not cause cumulative impacts to vegetation in the region.

Conclusion

There would be no project-related impacts as a result of this alternative. Vegetative communities would continue to receive negligible to minor, long-term adverse impacts from visitor use. There would be no impairment of park resources or values.

IMPACTS OF ALTERNATIVE B - PREFERRED

Vegetation under this alternative would be damaged or destroyed by construction activities such as blading (clearing), excavation, and crushing from vehicles. This would have the potential to adversely impact vegetation on approximately 2.8 acres. This impact would be short-term and adverse but negligible because vegetation on the site has been previously severely impacted. A portion of this total acreage would be revegetated with native species following construction, resulting in a long-term, minor beneficial effect.

Cumulative Impacts

Vegetation in the region is being impacted by commercial and residential development, road construction and maintenance, livestock grazing, and agriculture. These actions cause long-term adverse impacts from destruction of native vegetation and introduction of exotic species that replace natives. The loss of some forested area at Sunset Point has already occurred with the construction of the existing facility, road and picnic area. This alternative would contribute a negligible adverse impact and a minor, beneficial impact to other past, present and reasonably foreseeable future actions causing impacts to vegetation, resulting in a minor, long-term adverse cumulative impact to vegetation in the region.

Conclusion

Overall effects on vegetative communities in the park would be minor, long-term and beneficial. There would be no impairment of park resources or values.

Wildlife

Methodology

Available information on known wildlife resources was compiled. Predictions about short- and long-term site impacts were based on previous studies of construction and visitor impacts to wildlife resources and information from park staff.

The thresholds of change for the intensity of an impact are defined as follows:

Negligible:

an action that could result in a change to a population or individuals of a species, but the change would be so small that it would not be of any measurable or perceptible consequence.

Minor: an action that could result in a change to a population or individuals of a species. The

change would be small and localized and of little consequence.

Moderate: an action that would result in some change to a population or individuals of a species.

The change would be measurable and of consequence to the species but more localized.

Major: an action that would have a noticeable change to a population or individuals of a species.

The change would be measurable and result in a severely adverse or major beneficial

impact, and possible permanent consequence, upon the species.

IMPACTS OF ALTERNATIVE A - NO ACTION

Under the no action alternative, there would be no project-related aural, visual or ground disturbance with the potential to impact wildlife. The area of the proposed project has been in a disturbed state and has received heavy visitation for 30 years. This would continue under this alternative. Any wildlife currently using the site would continue using it in the same manner. There would be no changes in the current status of wildlife communities either in terms of species composition or population dynamics.

Cumulative Impacts

Impacts to biotic communities in and around Bryce Canyon are occurring on lands managed by the federal government, state of Utah and private landowners. In the past, present and foreseeable future these impacts could include road construction or improvement; livestock grazing; mineral extraction; construction of homes, businesses and associated utility lines; fences; and development associated with public use. Actions such as these can disrupt or fragment habitat, displace individuals or otherwise cause stress to animals. Adverse impacts are occurring as wildlife is slowly becoming more restricted by current land uses, increasing development and human activity, causing individuals and populations to either adapt or move. There would be no project-related impacts to wildlife as a result of this alternative and, therefore, no cumulative impacts.

Conclusion

Wildlife populations or habitat would not be impacted by the no action alternative. There would be no impairment of park resources or values.

IMPACTS OF ALTERNATIVE B - PREFERRED

Due to the disturbance of soil and vegetation, some animals inhabiting the impacted area, including small invertebrates, mammals and reptiles that live under rocks or in ground burrows would be displaced. Although wildlife may be somewhat used to traffic and human presence in the project area, the increased noise of construction and human presence associated with it would likely effect resident wildlife through temporary behavior modification (i.e. typical fear and aversion reactions). These adverse impacts would be short-term and minor because they are localized. Construction is expected to last 4 to 5 months.

The area of the proposed project has been in a disturbed state and has received heavy visitation for 30 years. Construction in this alternative would occur on previously disturbed land that provides minimal wildlife habitat when compared to undisturbed land. This minimizes both the short-term disturbance of wildlife and further impacts on habitat connections throughout the park. Planned revegetation of areas would restore some habitat. There would be a negligible long-term adverse impact on the quality and amount of habitat available for wildlife in Bryce Canyon National Park.

Cumulative Impacts

Impacts to biotic communities in and around Bryce Canyon are occurring on lands managed by the federal government, state of Utah and private landowners. In the past, present and foreseeable future these actions could include road construction or improvement; livestock grazing; mineral extraction; construction of homes, businesses and associated utility lines; fences; and development associated with public use (see section on Cumulative Impacts for a list of actions). These actions can disrupt or fragment habitat, displace individuals or otherwise cause stress to animals, a long-term adverse impact that varies by species from negligible to moderate. Wildlife is slowly becoming more restricted by current land uses, increasing development and human activity, causing individuals and populations to either adapt or move. This alternative involves reconstruction of existing facilities that would cause minor, short-term adverse impacts. The impacts of the preferred alternative, in conjunction with the adverse impacts of other reasonable foreseeable future actions, would result in minor adverse cumulative impacts to wildlife in the region.

Conclusion

This alternative would cause a minor, short-term adverse impact to wildlife. There would be no impairment of park resources or values.

Threatened and Endangered Species

Methodology

Information on possible threatened, endangered, candidate species and species of special concern was gathered from the U.S. Fish and Wildlife Service and park staff. Known habitat associated with threatened, endangered, candidate species and species of special concern were compared with locations of proposed developments and modifications of existing facilities. Known impacts caused by similar projects were also considered.

The thresholds of change for the intensity of an impact are defined as follows:

Negligible: an action that could result in a change to a population or individuals of a species or

designated critical habitat, but the change would be so small that it would not be of any measurable or perceptible consequence. The change would result in a *no effect* opinion

from the U.S. Fish and Wildlife Service.

Minor: an action that could result in a change to a population or individuals of a species or

designated critical habitat. The change would be measurable but small and localized and of little consequence, and result in a *not likely to adversely effect* opinion from the U.S.

Fish and Wildlife Service.

Moderate: an action that would result in some change to a population or individuals of a species or

designated critical habitat. The change would be measurable and of consequence but likely result in a *not likely to adversely effect* opinion from the U.S. Fish and Wildlife

Service.

Major: an action that would result in a noticeable change to a population or individuals of a

species or resource or designated critical habitat. The change would result in a may

adversely effect opinion from the U.S. Fish and Wildlife Service.

IMPACTS OF ALTERNATIVE A - NO ACTION

Under the no action alternative, there would be no project-related aural, visual or ground disturbance with the potential to impact federally listed threatened or endangered species or their habitat. Any listed species currently using the site would continue using it in the same manner under this alternative. No change from the current status of these species would result from implementation of this alternative.

Cumulative Impacts

The decline in the number of prairie dogs from the 1920s to the 1970s was caused by human-related habitat alteration and by poisoning, which resulted from the belief that prairie dogs compete with domestic livestock for forage. At present, the Utah prairie dog is still threatened over much of its range by loss of habitat. In addition, the damage caused by local concentrations of prairie dogs has provoked farmers in some areas to kill them illegally to protect crops and cropland. A special rule was issued by the Fish and Wildlife Service to allow a take of "nuisance" prairie dogs in certain Utah counties (USFWS 1991). Because this alternative would not contribute to the impacts of other past, present and reasonably foreseeable future actions, there would also be no project-related cumulative impacts to listed, candidate or other sensitive species.

Conclusion

The No Action alternative would have no effect on special status species. Because this alternative would not result in a major adverse impact to a key resource or value of Bryce Canyon National Park, there would be no impairment of those resources or values.

IMPACTS OF ALTERNATIVE B - PREFERRED

The area of the proposed project has been an area of park development for 30 years and there is no evidence that it was ever utilized by prairie dogs. There would be no direct or indirect impact on prairie dogs and the amount of suitable habitat for Utah prairie dogs would not change from what is currently available in Bryce Canyon National Park or surrounding lands as a result of this alternative.

Cumulative Impacts

The decline in the number of prairie dogs from the 1920s to the 1970s was caused by human-related habitat alteration and by poisoning, which resulted from the belief that prairie dogs compete with domestic livestock for forage. At present, the Utah prairie dog is still threatened over much of its range by loss of habitat. In addition, the damage caused by local concentrations of prairie dogs has provoked farmers in some areas to kill them illegally to protect crops and cropland. A special rule was issued by the Fish and Wildlife Service to allow a take of up to 6,000 "nuisance" prairie dogs on private lands in Utah (USFWS 1991). Loss of habitat and the allowed take contribute to long-term adverse effects on this species. Because this alternative would take place on previously disturbed and uninhabited ground, it would not contribute to the impacts of other past, present and reasonably foreseeable future actions to the Utah prairie dog. Thus, there would be no project-related contribution to cumulative impacts on listed, candidate or other sensitive species.

Conclusion

The preferred alternative would have no effect on any special status species. Because this alternative would not result in a major adverse impact to a key resource or value of Bryce Canyon National Park, there would be no impairment of those resources or values.

Visitor Experience

Methodology

Visitor information and personal observation of visitation patterns combined with assessment of what is available to visitors under current management were used to estimate the effects of the various alternatives.

The thresholds of change for the intensity of an impact are defined as follows:

Negligible: the impact is barely detectable, and/or will affect few visitors.

Minor: the impact is slight but detectable, and/or will affect some visitors.

Moderate: the impact is readily apparent and/or will affect many visitors.

Major: the impact is severely adverse or exceptionally beneficial and/or will affect the majority

of visitors.

IMPACTS OF ALTERNATIVE A - NO ACTION

The small, inadequate comfort station would remain. No new facilities would be constructed as a result of this alternative.

This facility provides very poor service and is completely inadequate in meeting the needs of visitors to Bryce Canyon. Visitor complaints regarding this facility are received daily regarding long lines, shortage of toilets, interior condition and odors. Adverse impacts to visitor experience would continue. These impacts would reach moderate levels during peak use periods as lines begin to form and facilities need maintenance (cleaning, restocking, etc.). This visitor dissatisfaction can result in littering, vandalism of government property, and social trailing.

Visitor use of the sites would increase if overall park visitation increases, which would make the situation worse. Adverse impacts would increase in intensity.

Scenic quality of or from the site would not be affected.

Cumulative Impacts

Other current and foreseeable projects in the area have the potential to affect park visitation. Tourism-related visits to the region are occurring on lands managed by the National Park Service, Bureau of Land Management, Forest Service and private landowners. This alternative would not cause a change in visitation or visitor experience in the area from current and projected levels and, therefore, would not contribute to the cumulative impacts of other past, present and reasonably foreseeable future actions, to the type or level of visitation in the region. Therefore, there would be no cumulative impacts to visitor experience under this alternative.

Conclusion

There would be no new impacts to visitor experience under the No Action alternative. However, it would cause the continuation of minor to moderate, long-term adverse impacts to opportunities for visitors to have a pleasant park experience.

IMPACTS OF ALTERNATIVE B - PREFERRED

Visitor experience could receive short-term adverse impacts from the sights and sounds of construction and possible inconvenience in parking or disruptions of traffic flow. Construction would cause a minor short-term increase in the ambient noise at the site. After the construction period, noise would return to pre-project levels and normal traffic flow would resume.

The proposal would result in two men's and two women's rooms so that one can remain open while the other is closed for cleaning or maintenance. All restrooms would have a handicapped accessible stall and be in compliance with current accessibility guidelines. This alternative would result in a modern, fully functional visitor restroom and picnic area which would result in moderate, long-term beneficial effects on visitor experience.

Cumulative Impacts

Other current and foreseeable projects in the area have the potential to affect park visitation. Tourism-related visits to the region are occurring on lands managed by the National Park Service, Bureau of Land Management, Forest Service and private landowners. Designation of the adjacent Grand Staircase-Escalante National Monument in 1996 has led to an increase in visitation to the region. This alternative would not cause a change in visitation in the area from current and projected levels. Upgrading the current facilities along with other park projects providing continued services to park visitors when combined with other past, present and future actions would result in long-term beneficial cumulative impacts to visitor experience.

Conclusion

There would be a minor, short-term adverse impact on visitors during construction and a moderate, long-term beneficial effect on visitor experience after construction.

CONSULTATION AND COORDINATION

Public Involvement

This Environmental Assessment will be made available for a 30-day public review period. The Park Service will perform a content analysis on comments received from internal sources, other agencies and the public. Substantive comments will be addressed as errata sheets attached to the Finding of No Significant Impact or the EA will be revised.

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Consultation

U.S. Fish and Wildlife Service, Utah Field Office, West Valley City, Utah.

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ATTACHMENTS

Site maps and design drawings follow this page.

Bryce Canyon Sunset Point Facilities

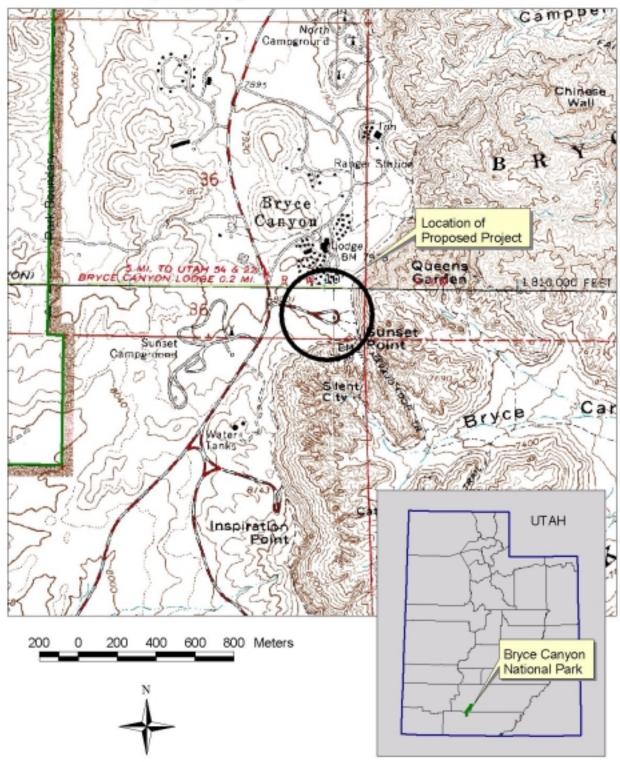


Figure 1. Location Map

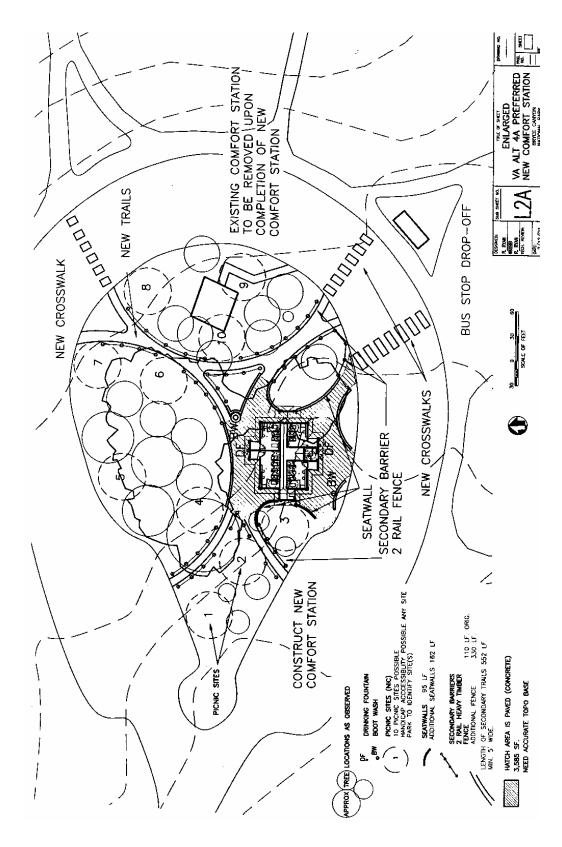


Figure 2. Proposed Site Design

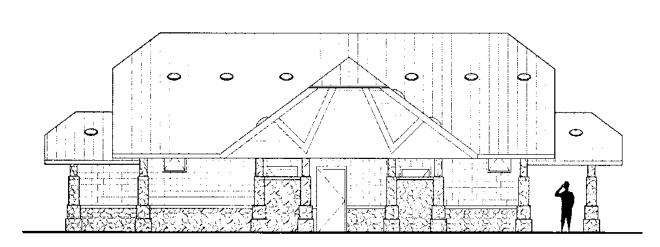


Figure 3. Proposed Facility Design